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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/829,580	04/22/2004	Takao Ochi	10873.1430US01	6719	
23552 7	590 12/13/2005		EXAMINER		
MERCHANT & GOULD PC		DINH, TUAN T			
P.O. BOX 2903	3				
MINNEAPOL	IS, MN 55402-0903		ART UNIT	PAPER NUMBER	
			2841		
			DATE MAIL ED: 12/13/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

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`.		Application No.	Applicant(s)	V
Office Action Summary		10/829,580	OCHI ET AL.	
		Examiner	Art Unit	
		Tuan T. Dinh	2841	
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address	
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO. 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from . cause the application to become ABANDONE	N. mely filed  the mailing date of this communication. ED (35 U.S.C. 8 133)	
Status				
2a)□	Responsive to communication(s) filed on This action is <b>FINAL</b> . 2b) This Since this application is in condition for allower closed in accordance with the practice under E	_ action is non-final. nce except for formal matters, pro		
Dienositi	ion of Claims	, , , , , , , , , , , , , , , , , , , ,	3. 3. 3. 3. 3. 3.	
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-10</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) <u>1-5 and 8-10</u> is/are rejected.  Claim(s) <u>6 and 7</u> is/are objected to.  Claim(s) are subject to restriction and/or	wn from consideration.		
Applicati	ion Papers			
9)□ 10)□	The specification is objected to by the Examine. The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction to the oath or declaration is objected to by the Example.	epted or b) objected to by the drawing(s) be held in abeyance. Selion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).	
Priority ι	ınder 35 U.S.C. § 119			
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	ion No ed in this National Stage	
	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4)	(PTO-413) ate	
3) 🔯 Inforn	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 04/22/04.		Patent Application (PTO-152)	

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-5, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Haghiri-Tehrani et al. (U.S. Patent 5,834,755).

As to claims 1-2, Haghiri-Tehrani et al. discloses an electronic circuit device as shown in figures 1-5, comprising:

a board (1, column 2, lines 60-61) on which wirings (a metal layer having contact surface 5, column 2, lines 62-63) to the internal terminals (outer portion 23 of element 5A, see figure 5) are formed; an electronic component (9, column 3, line 2) that is mounted on the board and is connected with the internal terminals (23); and an encapsulation resin (15, column 3, line 5) with which the electronic component (9) and the internal terminals (23) are encapsulated, wherein a part of the wiring (5) formed as a multi-rings (5A, 5B) forms a ring-shaped portion, the ring-shaped portion having a plurality of gaps (rings being cutout, see figures 3-5) by which the ring-shaped portion is divided into a plurality of discontinuous ring-constituting sections (see figures 3-4), and wherein the plurality of ring-constituting sections are connected to the respective

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internal terminals, and a coating region of the encapsulation resin (15) is surrounded with the ring-shaped portion.

As to claim 3, Haghiri-Tehrani et al. discloses in figure 5 that the internal terminals (23) are disposed within the ring-shaped portion, the wirings (5) extend from an outside of the ring-shaped portion (5B) to the respective internal terminals (23) so as to be connected thereto via the ring-shaped portion, and a connecting point of the wiring extending from the internal terminal with the ring-shaped portion and a connecting point of the wiring extending from the outside with the ring-shaped portion are disposed at positions different from each other.

As to claim 4, Haghiri-Tehrani et al. discloses an intersecting portion of the ringshaped portion and one end of the wiring is shaped like a letter T, see figure 5.

As to claim 5, Haghiri-Tehrani et al. discloses in figures 3-5 the gaps provided in the respective wirings of the multi-ring as the ring-shaped portion are disposed so as not to be on a same normal line with respect to the ring-shaped portion.

As to claim 8, Haghiri-Tehrani et al. discloses a part of the wiring (5) as shown in figures 3-5 is formed so as to divide an inner region of the ring-shaped portion into a region including the internal terminals (23) and a region not including the internal terminals.

As to claim 9, Haghiri-Tehrani et al. discloses three or more wirings (5, see figures 3, 5) are formed, and at an intersecting portion of the wirings and the ringshaped portion, two or less line segments are disposed linearly and in parallel from an outside to an inside of the ring-shaped portion.

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As to claim 10, Haghiri-Tehrani et al. discloses the wiring (5), see figures 3-5 extending on the outside of the ring-shaped portion and the ring-shaped portion of the wiring intersect each other at angles of 60 degress or more.

## Allowable Subject Matter

3. Claims 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eberhardt et al. and Hirai et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Tuan Dinh

December 07, 2005.